Amendments to the Claims

Claims 1-15. (Canceled)

16. (New) A wear-resistant coating, in particular an erosion-resistant coating applied to a surface of a component that is exposed to fluid loads, in particular a gas turbine component whose surface is to be protected, wherein the wear-resistant coating is made of one or more multilayer systems applied repeatedly to the surface to be coated, wherein each of the multilayer systems has at least four different layers, wherein a first layer facing the surface that is to be coated of each multilayer system is made of a metallic material adapted to a composition of the component surface that is to be coated, wherein a second layer applied to the first layer of each multilayer system is made of a metal alloy material that is adapted to the composition of the component surface to be coated, wherein a third layer applied to the second layer of each multilayer system is made of a gradated metal-ceramic material and a fourth layer applied to the third layer of each multilayer system is made of a nanostructured ceramic material.

17. (New) The wear-resistant coating according to Claim 16, wherein each of the multilayer systems applied repeatedly has a same layer structure.

18. (New) The wear-resistant coating according to Claim 16, wherein the component is made of a nickel-based material or a cobalt-based material or an iron-based material and wherein the first layer of each multilayer system is made of a nickel material or a cobalt material.

19. (New) The wear-resistant coating according to Claim 16, wherein the component is made of a nickel-based material or cobalt-based material or iron-based material and wherein the second layer of each multilayer system is made of a nickel alloy material, preferably an NiCr material or a cobalt alloy material or an iron alloy material.

20. (New) The wear-resistant coating according to Claim 16, wherein the component is made of a nickel-based material or a cobalt-based material or an iron-based material and wherein the third layer of each multilayer system is made of CrN_{1-x} material.

21. (New) The wear-resistant coating according to Claim 16, wherein the component is made of a nickel-based material or a cobalt-based material or an iron-based material and wherein the fourth layer of each multilayer system is made of a CrN material and is nanostructured.

22. (New) The wear-resistant coating according to Claim 16, wherein the component is made of a titanium-based material and wherein the first layer of each multilayer system is formed from a titanium material or a platinum material or a palladium material.

23. (New) The wear-resistant coating according to Claim 22, wherein the second layer of each multilayer system is formed from a titanium alloy material or an aluminum alloy material, preferably a TiCrAl material or a CuAlCr material.

24. (New) The wear-resistant coating according to Claim 22, wherein the third layer of each multilayer system is formed from a $CrAlN_{1-x}$ material or a $TiAlN_{1-x}$ material.

25. (New) The wear-resistant coating according to Claim 22, wherein the fourth layer of each multilayer system is made of a CrAlN material or a TiAlN material or a TiAlSiN material or a TiN/AlN material and is nanostructured.

26. (New) The wear-resistant coating according to Claim 16, wherein a total layer thickness of the layers of each multilayer system is less than 15 μm.

27. (New) The wear-resistant coating according to Claim 16, wherein several multilayer systems are applied repeatedly to the surface of the component, and wherein an adhesive layer is applied between the surface of the component and a first multilayer system adjacent to the surface.

28. (New) A component, in particular a gas turbine component, having a wear-resistant coating, especially an erosion-resistant coating which is applied to a surface of the component that is exposed to fluidic loads and is to be protected, the wear-resistant coating being made of one or more multilayer systems applied repeatedly to the surface, wherein each of the multilayer systems has at least four different layers; wherein a first layer facing the surface in each multilayer system consists of a metallic material adapted to a composition of the component surface; wherein a second layer of each multilayer system applied to the first layer consists of a metal alloy material adapted to the composition of the component surface; wherein a third layer applied to the second layer of each multilayer system is made of a gradated metal-ceramic material; and wherein a fourth layer applied to the third layer of each multilayer system consists of a nanostructured ceramic material.

29. (New) The component according to Claim 28, wherein the component is a housing or a guide vane or a rotor blade or a guide vane segment or a rotor blade segment or an integrally bladed rotor of a gas turbine, in particular of an aircraft engine.

30. (New) A wear-resistant coating for a surface of a component that is exposed to fluid loads, comprising:

a first layer made of a metallic material adapted to a composition of the component surface to be coated;

a second layer applied to the first layer made of a metal alloy material that is adapted to the composition of the component surface;

a third layer applied to the second layer made of a gradated metal-ceramic material; and

a fourth layer applied to the third layer made of a nanostructured ceramic material.

31. (New) A component that is exposed to fluid loads, comprising:

a wear-resistant coating applied to a surface of the component, wherein the coating includes:

a first layer made of a metallic material adapted to a composition of the surface of the component;

a second layer applied to the first layer made of a metal alloy material that is adapted to the composition of the surface of the component;

a third layer applied to the second layer made of a gradated metal-ceramic material; and

a fourth layer applied to the third layer made of a nanostructured ceramic material.

32. (New) A method of forming a wear-resistant coating for a surface of a component that is exposed to fluid loads, comprising the steps of:

forming a first layer made of a metallic material adapted to a composition of the component surface to be coated;

applying a second layer to the first layer made of a metal alloy material that is adapted to the composition of the component surface;

applying a third layer to the second layer made of a gradated metal-ceramic material; and

applying a fourth layer to the third layer made of a nanostructured ceramic material.

33. (New) A method of protecting a surface of a component that is exposed to fluid loads, comprising the steps of:

applying a first layer made of a metallic material adapted to a composition of the surface of the component to the surface of the component;

applying a second layer to the first layer made of a metal alloy material that is adapted to the composition of the surface of the component;

applying a third layer to the second layer made of a gradated metal-ceramic material; and

applying a fourth layer to the third layer made of a nanostructured ceramic material.